Claim Amendments

Please amend claims 31, 36, 37, 43, and 44 as follows.

1 – 7. (Canceled)

8. (Withdrawn) A method of managing locks by a distributed lock management system, the method comprising the steps of:

a first lock manager on a first node receiving a first request for a first lock on a resource from a first requester;

wherein said distributed lock management system includes said first lock manager;

determining that said first request may not be granted because of a blocking condition;

said first lock manager storing in a data structure first data that may be used by said first requester to obtain notification that said blocking condition should no longer cause denial of a request for a lock on said resource; and

said first lock manager transmitting to said first requester a first response that:

indicates that said first request is denied, and

includes a copy of said first data.

9. (Withdrawn) The method of claim 8, wherein the steps include:

receiving a message that indicates that said blocking condition should no longer cause denial of a request for a lock on said resource; and

modifying said data structure to indicate that said blocking condition should no longer cause denial of a request for a lock on said resource.

10. (Withdrawn) The method of claim 9, wherein the step of receiving said message includes receiving said message from said first requester.

11. (Withdrawn) The method of claim 8, wherein:

the steps further include said first lock manager transmitting to another lock manager of said distributed lock management system a message requesting said first lock on said resource; and

wherein the step of determining is based on a second response received from said other lock manager indicating that said first request cannot be granted;

wherein said second response includes a copy of said first data.

12. (Withdrawn) The method of claim 8, wherein the steps further include:

receiving a second request for another lock on said resource;

determining, based on said first data, that said second request may not be granted;

said first lock manager transmitting to said second requester another response that:

indicates that said second request is not granted, and

includes a copy of said first data.

13. (Withdrawn) The method of claim 12, wherein:

said first lock manager is a master of said resource; and

wherein the step of receiving said second request includes receiving said second request from another lock manager.

14. (Withdrawn) The method of claim 12, wherein:

said first lock manager and a process are on a node, wherein said process is different than said first requester; and

the step of receiving said second request includes receiving said second request from said process.

15. (Withdrawn) The method of claim 8, wherein:

said distributed lock management system includes a master for said resource; and

wherein no lock is currently granted for said resource by said master.

16- 22. (Canceled)

23. (Withdrawn) A computer-readable medium carrying one or more sequences of instructions for managing locks by a distributed lock management system, wherein execution of the one or more sequences of instructions by one or more processors causes the one or more processors to perform the steps of:

a first lock manager on a first node receiving a first request for a first lock on a resource from a first requester;

wherein said distributed lock management system includes said first lock manager;

determining that said first request may not be granted because of a blocking condition;

said first lock manager storing in a data structure first data that may be used by said first requester to obtain notification that said blocking condition should no longer cause denial of a request for a lock on said resource; and

said first lock manager transmitting to said first requester a first response that:

indicates that said first request is denied, and

includes a copy of said first data.

24. (Withdrawn) The computer-readable medium of claim 23, wherein the steps include:

receiving a message that indicates that said blocking condition should no longer cause denial of a request for a lock on said resource; and

modifying said data structure to indicate that said blocking condition should no longer cause denial of a request for a lock on said resource.

25. (Withdrawn) The computer-readable medium of claim 24, wherein the step of receiving said message includes receiving said message from said first requester.

26. (Withdrawn) The computer-readable medium of claim 23, wherein:

the steps further include said first lock manager transmitting to another lock manager of said distributed lock management system a message requesting said first lock on said resource; and

wherein the step of determining is based on a second response received from said other lock manager indicating that said first request cannot be granted;

wherein said second response includes a copy of said first data.

27. (Withdrawn) The computer-readable medium of claim 23, wherein the steps further include:

receiving a second request for another lock on said resource;

determining, based on said first data, that said second request may not be granted;

said first lock manager transmitting to said second requester another response that:

indicates that said second request is not granted, and

includes a copy of said first data.

28. (Withdrawn) The computer-readable medium of claim 27, wherein:

said first lock manager is a master of said resource; and

wherein the step of receiving said second request includes receiving said second request from another lock manager.

29. (Withdrawn) The computer-readable medium of claim 27, wherein:

said first lock manager and a process are on a node, wherein said process is different than said first requester; and

the step of receiving said second request includes receiving said second request from said process.

30. (Withdrawn) The computer-readable medium of claim 23, wherein:

said distributed lock management system includes a master for said resource; and

wherein no lock is currently granted for said resource by said master.

31. (Currently Amended) A method, the method comprising the steps of:

a requester transmitting to a lock management system a request for a certain lock on a first resource;

said lock management system denying said request based on a blocking condition that, while in effect, said lock management system does grant a request for a lock on a second resource different than said first resource;

said requester receiving ~~a response~~ from said lock management system a response that (1) denies said request ~~for a certain lock on said first resource; wherein said response that denies said request for a certain lock on said first resource is caused by a blocking condition; wherein said response~~ and (2) includes data that identifies ~~a second resource different than said first resource;~~ the second resource; and

~~wherein said lock management system does not grant a lock on said second resource to said requester while said blocking condition is in effect; and~~

said requester determining said blocking condition is no longer in effect by performing certain steps that include:

said requester transmitting to said lock management system a request for a lock on said second resource; and

said requester receiving from said lock management system a response that grants said request for said lock on said second resource.

32. (Previously Presented) The method of claim 31, wherein said second resource is a transaction and said first resource is a resource locked for said transaction.

33. (Previously Presented) The method of claim 32, wherein said data that identifies a second resource includes a transaction id identifying said transaction.

34. (Previously Presented) The method of claim 31, wherein:
said first resource is a data block; and
said blocking condition is based on said data block undergoing a block-split operation.

35. (Previously Presented) The method of claim 34, wherein said data block is marked to indicate the data block is undergoing said block split operation.

36. (Currently Amended) The method of claim 31, further including in response to determining when said blocking condition no longer prevents said lock management system from granting a lock on said first resource, said ~~first~~ requester informing said lock management system that said blocking condition is no longer in effect.

37. (Currently Amended) The method of claim 31, further including said ~~first~~ requester informing said lock management system that said blocking condition is no longer

effect by making another request for a lock of said first resource, said request including data specifying that said blocking condition is no longer effect.

38. (Currently Amended) A computer-readable medium carrying one or more sequences of instructions, wherein execution of the one or more sequences of instructions by one or more processors causes the one or more processors to perform the steps of:

a requester transmitting to a lock management system a request for a certain lock on a first resource;

said lock management system denying said request based on a blocking condition that, while in effect, said lock management system does grant a request for a lock on a second resource different than said first resource;

said requester receiving ~~a response~~ from said lock management system a response that (1) denies said request ~~for a certain lock on said first resource; wherein said response that denies said request for a certain lock on said first resource is caused by a blocking condition;wherein said response~~and (2) includes data that identifies ~~a second resource different than said first resource;~~the second resource; and

~~wherein said lock management system does not grant a lock on said second resource to said requester while said blocking condition is in effect; and~~

said requester determining said blocking condition is no longer in effect by performing certain steps that include:

said requester transmitting to said lock management system a request for a lock on said second resource; and

said requester receiving from said lock management system a response that grants said request for said lock on said second resource.

39. (Previously Presented) The computer-readable medium of claim 38, wherein said second resource is a transaction and said first resource is a resource locked for said transaction.

40. (Previously Presented) The computer-readable medium of claim 39, wherein said data that identifies a second resource includes a transaction id identifying said transaction.

41. (Previously Presented) The computer-readable medium of claim 38, wherein:
said first resource is a data block; and
said blocking condition is based on said data block undergoing a block-split operation.

42. (Previously Presented) The computer-readable medium of claim 41, wherein said data block is marked to indicate the data block is undergoing said block split operation.

43. (Currently Amended) The computer-readable medium of claim 38, the ~~one or more sequences of instructions~~steps further including ~~instructions for~~ in response to determining when said blocking condition no longer prevents said lock management system from granting a lock on said first resource, said ~~first~~ requester informing said lock management system that said blocking condition is no longer in effect.

44. (Currently Amended) The computer-readable medium of claim 38, the ~~one or more sequences of instructions~~steps further including ~~instructions for~~ said ~~first~~ requester informing said lock management system that said blocking condition is no longer effect by making another request for a lock of said first resource, said request including data specifying that said blocking condition is no longer effect.